AppleScript Studio Introduction

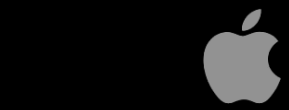
Session 902

AppleScript Studio Introduction

Tim Bumgarner
AppleScript Studio Engineer

Agenda

- Introduction
- Building a Studio Application
- Enhancing a Cocoa Application
- Using other languages
- Future features
- Q&A



Introduction

- What is AppleScript Studio?
- What can you do with Studio?

What Is AppleScript Studio?

- It is a combination of:
  - The AppleScript language
  - Project Builder
  - Interface Builder
  - The Cocoa application frameworks
- It is a development tool for building native Mac OS X applications
- It is a runtime system for running Studio applications

AppleScript Studio Components

AppleScript Studio Components

AppleScript Studio Components

Runtime Component

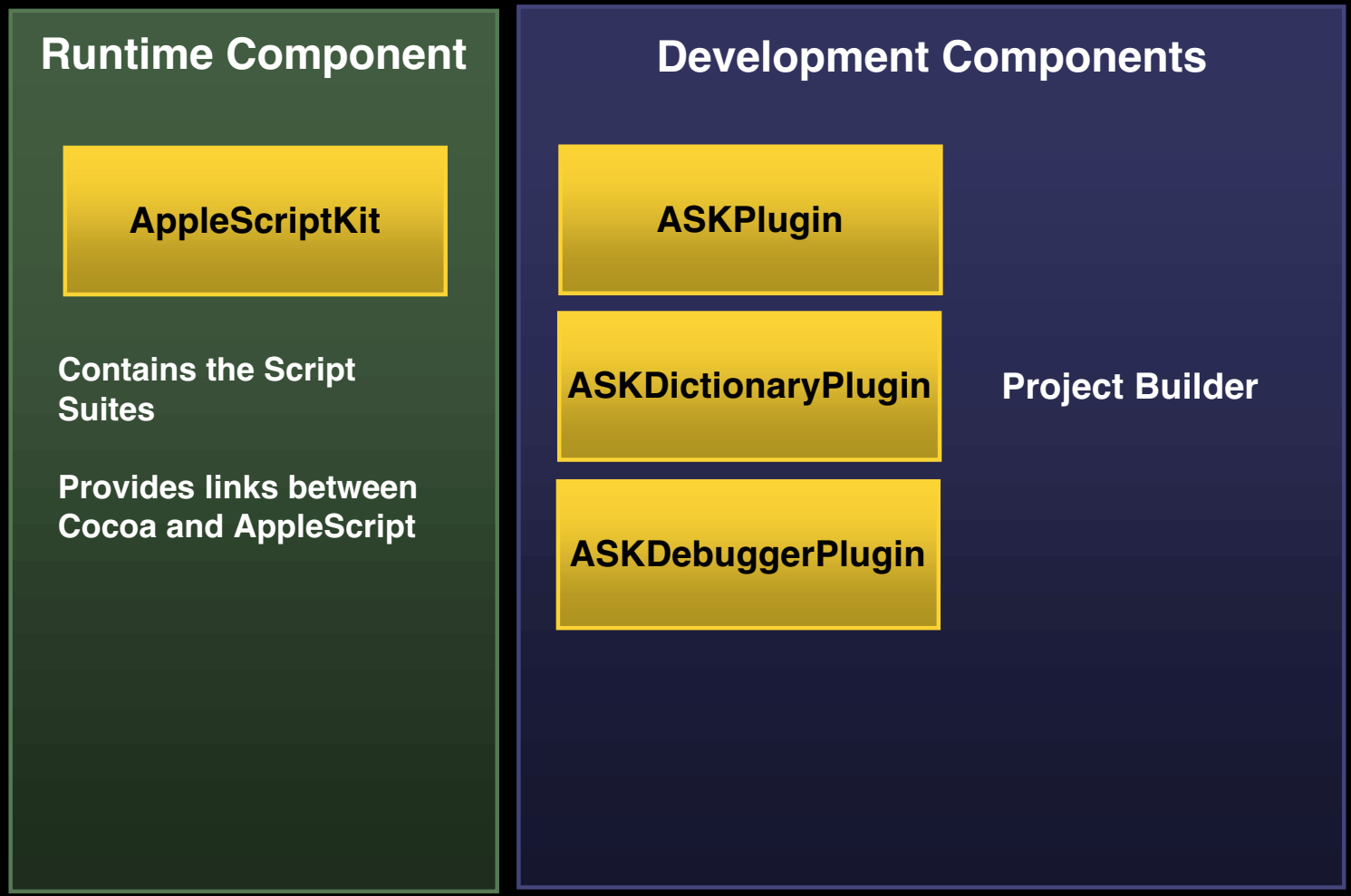
AppleScriptKit

Contains the Script Suites

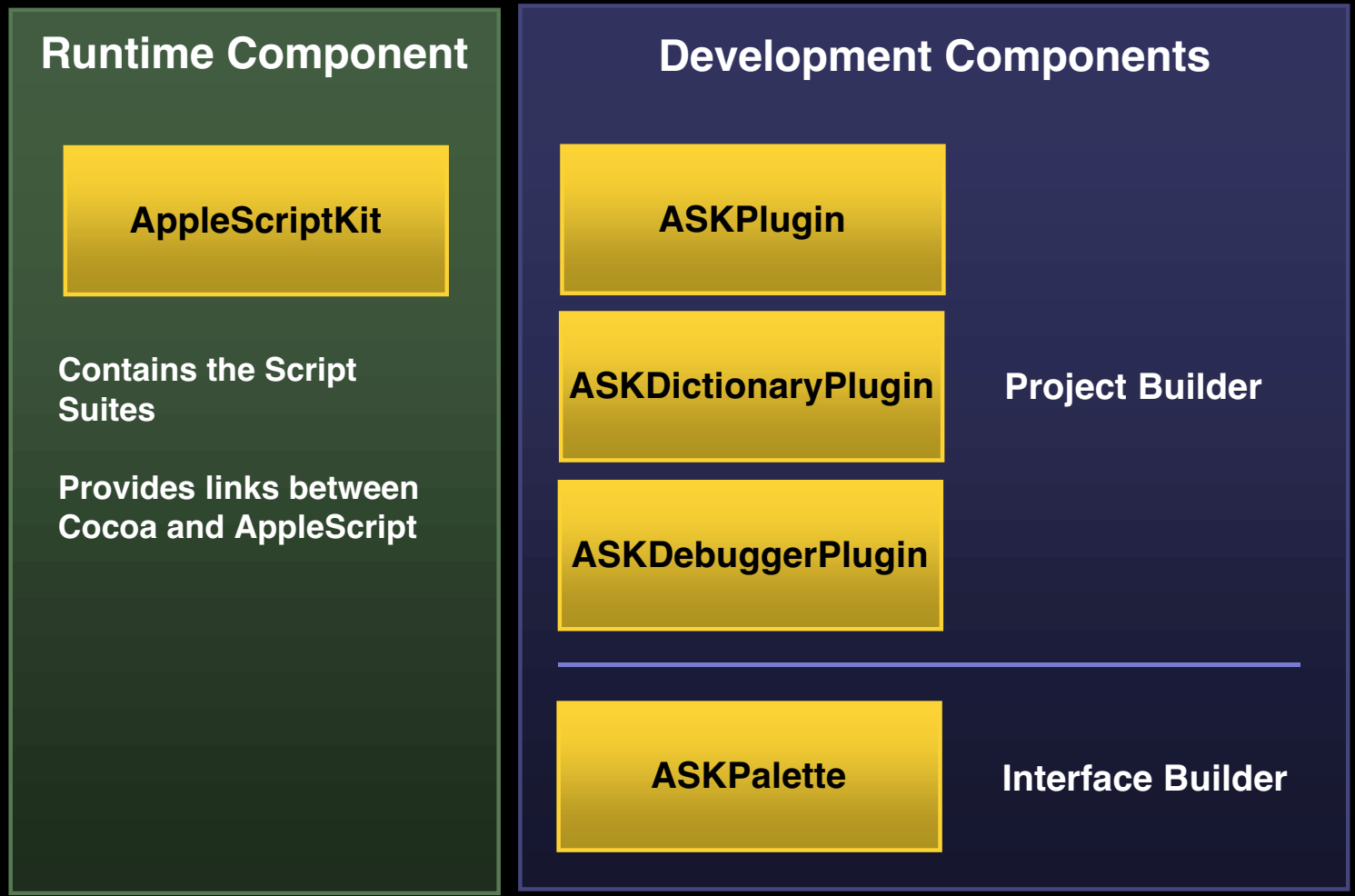
Provides links between Cocoa and AppleScript

Development Components

AppleScript Studio Components



AppleScript Studio Components



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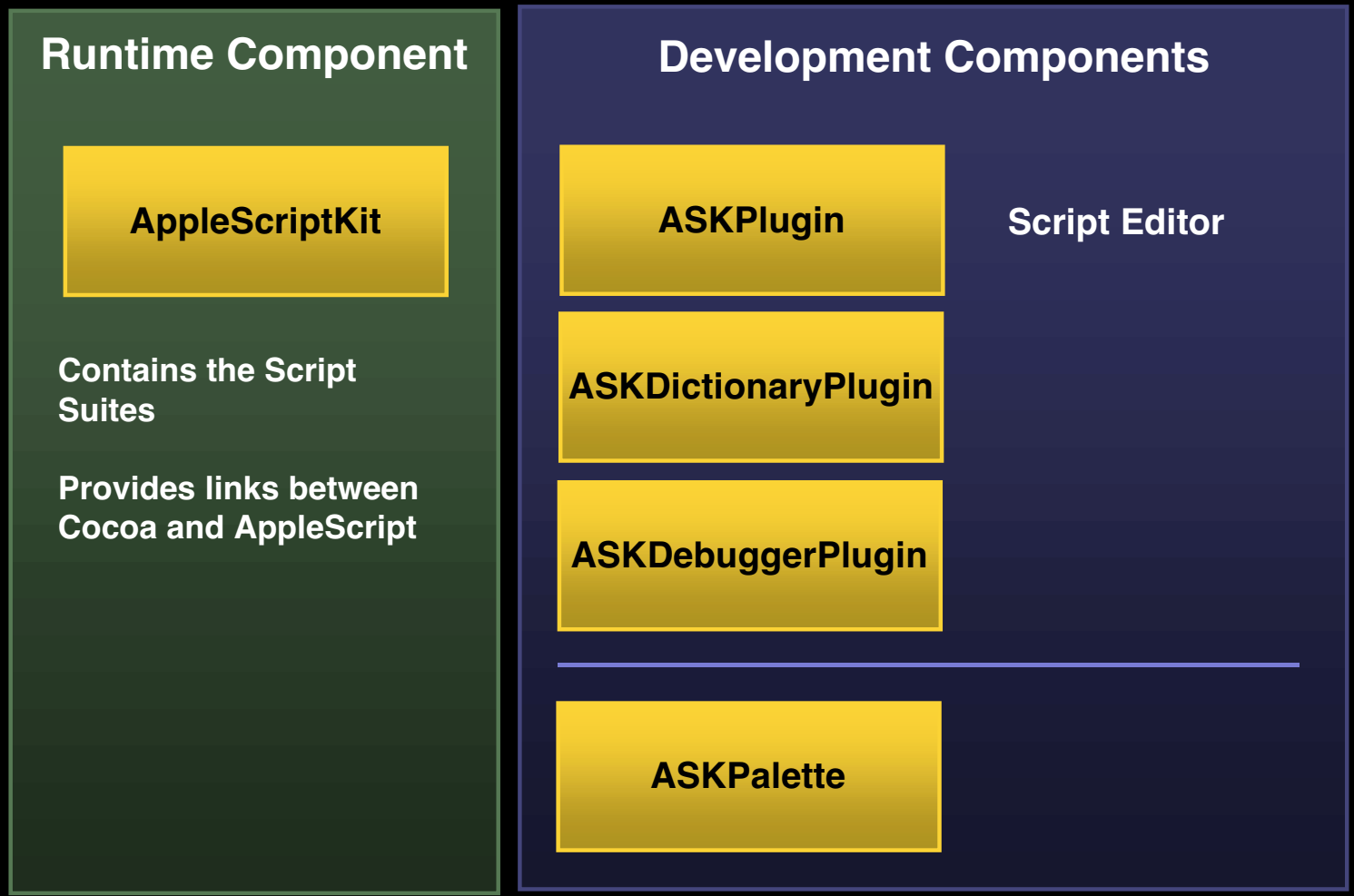

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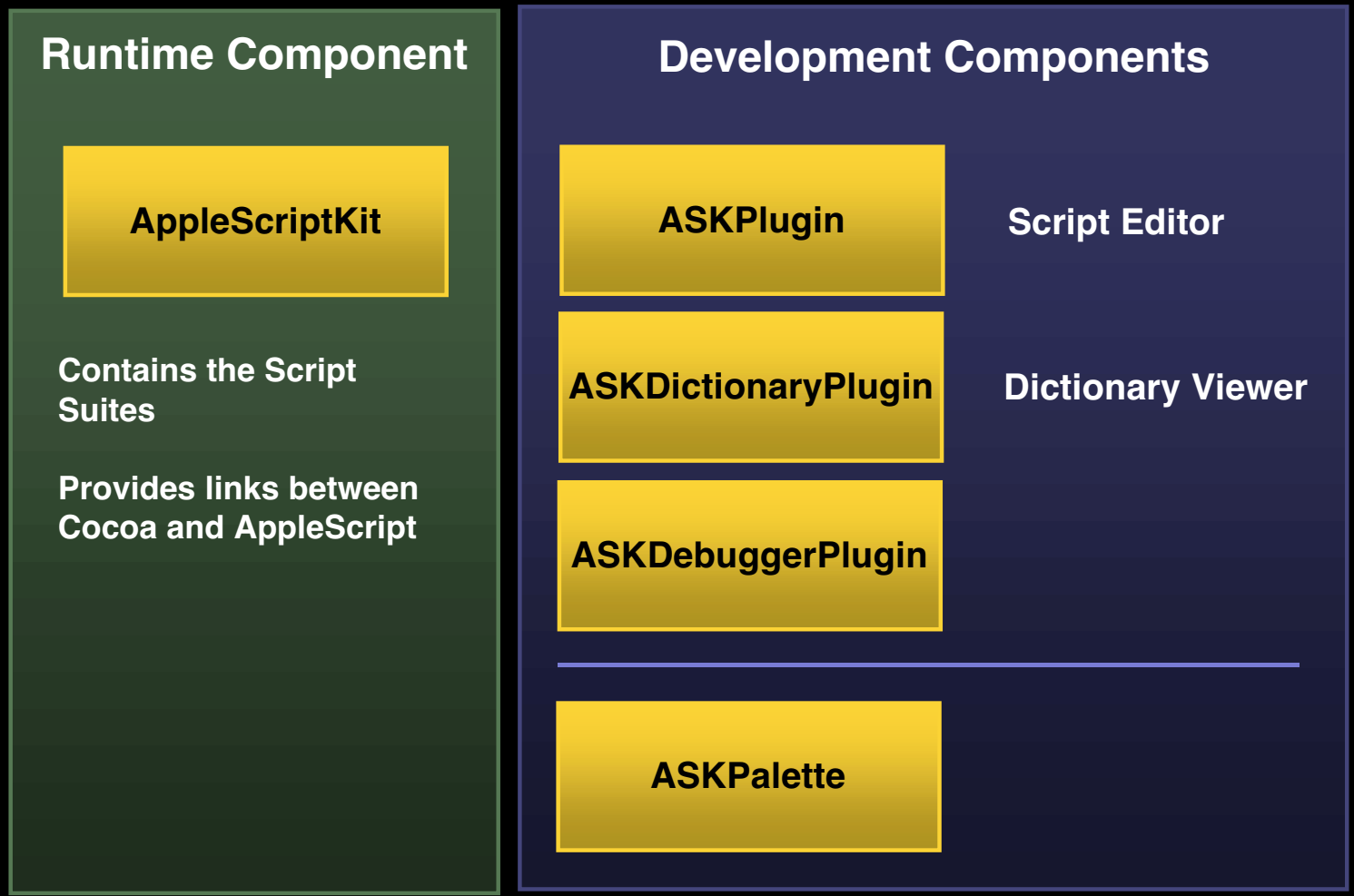

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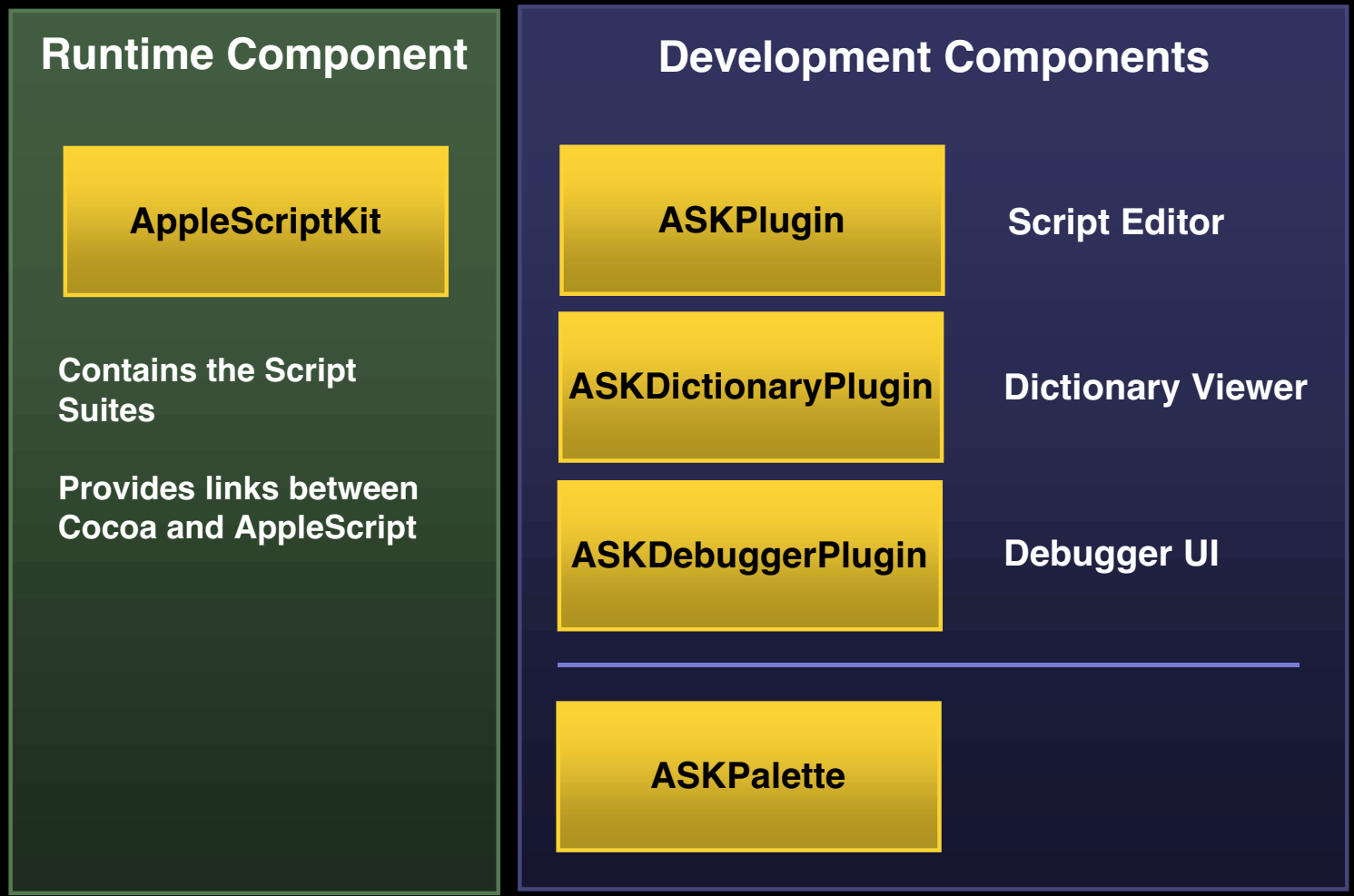

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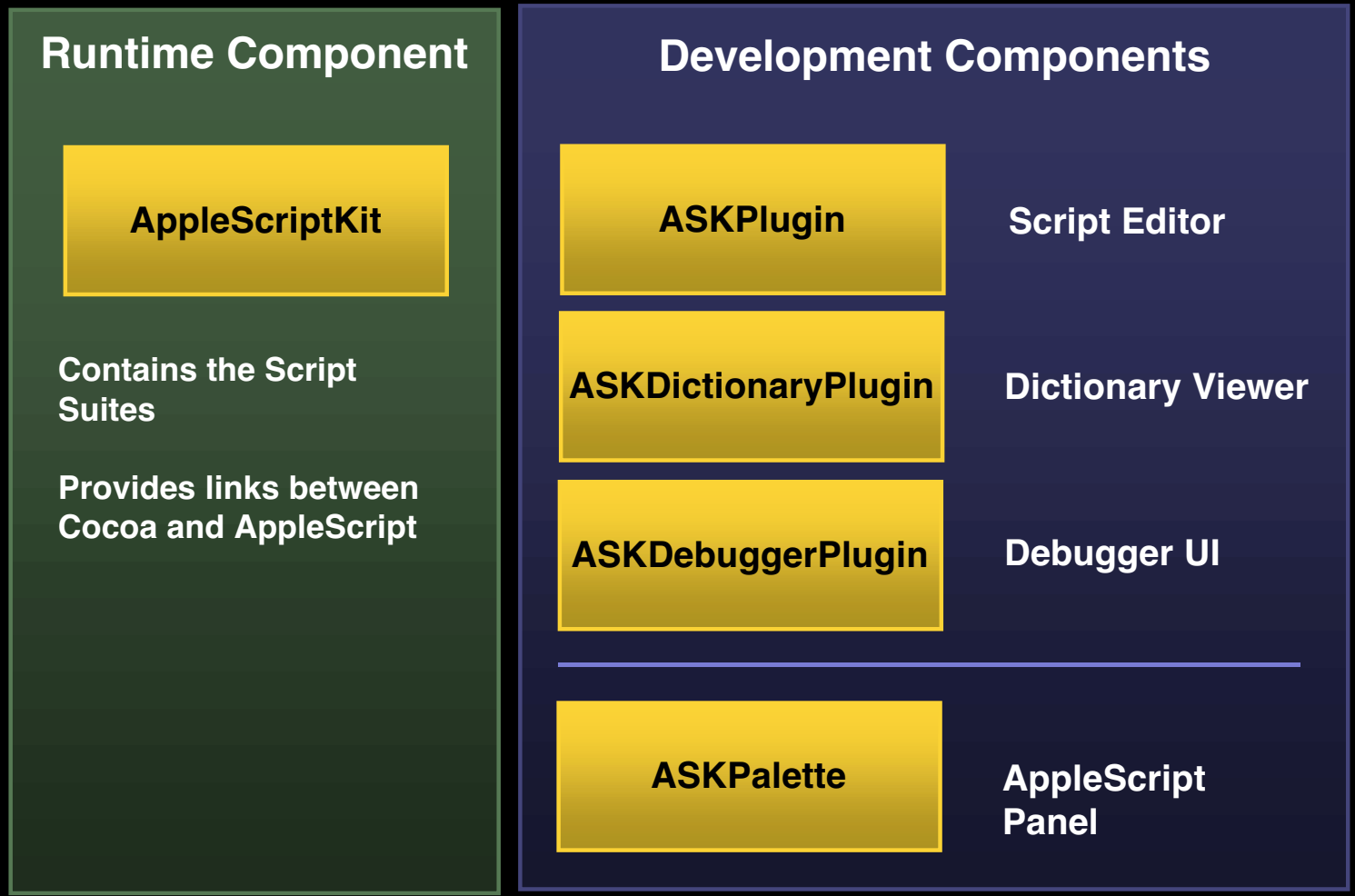


What Can You Do With Studio?

What Can You Do With Studio?

- Create Native Mac OS X Applications
- Take advantage of Cocoa's rich user interface
- Control other scriptable applications, both locally or across the network
- Use Web services

What Can You Do With Studio?

- Talk to the shell using ‘do shell script’
- Leverage code from other development languages, such as C, C++, Objective-C, Objective-C++ and even Java

Building a Studio Application

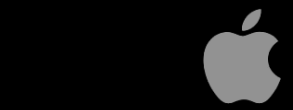
- Create a Currency Converter
- Enhance it with some SOAP

Demo

John Coelho
AppleScript QA Manager

Enhancing a Cocoa Application

- Start with the Sketch example
- Add the AppleScriptKit Framework
- Add an AppleScript Build Phase
- Add a “Change Color” Panel



Demo

John Coelho
AppleScript QA Manager

Using Other Languages

- You can call functions/methods in the following languages:
    - C, C++, Objective-C, Objective-C++ and Java (directly and through the Java Bridge)
- The ‘call method’ command is the key

Call Method

- Two major forms
  - call method “method_name”
    [of object(some_object)]
    [with parameter/parameters]
  - call method “class method_name”
    [of class “some_class”]
    [with parameter/parameters]

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Call Method

- Examples of object methods

```
call method “title” of object button 1

call method “setTitle:” of object button 1 with ¬
        parameter “Testing”

call method “selectRow:byExtendingSelection:” of object ¬
        table view 1 with parameters {1, true}
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Call Method

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Call Method

- Examples of class methods

```
call method “string” of class “NSString”

call method “stringWithString:” of class “NSString” with ¬
        parameter “Testing”

call method “dictionaryWithObjects:forKeys:” of ¬
        class “NSDictionary” with parameters {{“John Doe”}, ¬
        {“Name”}}
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Call Method

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Demo

John Coelho
AppleScript QA Manager

Jaguar Features

- Document-based applications
- Drag-and-Drop support
- Pasteboard support
- Data source improvements

Future Features

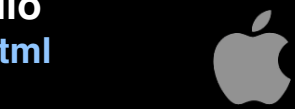
- New “script” Property
- Improved Dictionary Viewer
- Object Hierarchy Viewer
- Improved Web Services Integration
- Other OSA Languages

Documentation

AppleScript Studio

- Building Applications With AppleScript Studio
  - Overview
  - Concepts
  - Programming tips
  - Tutorials
- AppleScript Studio Terminology Reference
  - Complete terminology, by suite
  - Links between classes, commands, properties, elements and constants
  - PDF only; many descriptions forthcoming

Documentation > Mac OS X > Core Technologies > AppleScript > AppleScript Studio
http://developer.apple.com/techpubs/macosx/CoreTechnologies/AppleScriptStudio/index.html



Documentation

More AppleScript Documentation

- AppleScript Scripting Language
- Apple Event Manager
- AppleScript Studio (Jaguar)
- Building Applications With AppleScript Studio
  - Minor additions and corrections
- AppleScript Studio Terminology Reference
  - Includes terminology for AppleScript Studio 1.2
  - Many more descriptions and examples
  - Available in HTML

Documentation > Mac OS X > Core Technologies > AppleScript
http://developer.apple.com/techpubs/macosx/CoreTechnologies/coretechnologies.html

Roadmap

106 AppleScript Update	Room C **Wed., 9:00am**
FF007 AppleScript	Room J1 **Thurs., 3:30pm**
303 Cocoa Scripting	Room A2 **Thurs., 10:30am**
903 Exploring the Project Builder IDE	Hall 2 **Wed., 5:00pm**

Who to Contact

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Apple Developer Technologies
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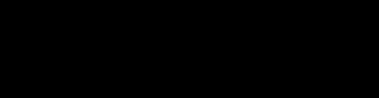
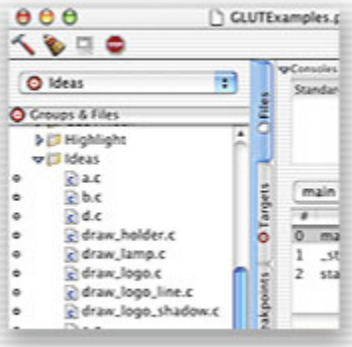
http://developer.apple.com/wwdc2002/urls.html

For More Information

- AppleScript Studio web site
  http://www.apple.com/applescript/macosx/ascript_studio/
- AppleScript Studio mailing list
  http://lists.apple.com
- AppleScript Studio examples
  /developer/examples/AppleScript Studio



Q&A



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http://developer.apple.com/wwdc2002/urls.html

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